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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/783,340	02/20/2004	Laurentius Cornelis Josephus Hesselmans	30394-1117	7703

5179 7590 12/12/2005

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ALBUQUERQUE, NM 87102

EXAMINER

CAMERON, ERMA C

ART UNIT PAPER NUMBER

1762

DATE MAILED: 12/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/783,340	HESSELMANS ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Erma Cameron	1762	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 November 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 7-10 and 12-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 11 and 18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Election/Restrictions*

1. Claims 7-10 and 12-17 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention and species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 11/18/2005 and **with** traverse in the reply filed on 8/19/2005.

Applicant's election with traverse of Group I and species in Groups A-K in the reply filed on 8/19/2005 is acknowledged. The traversal is on the ground(s) that the application is a 371 national stage entry into the United States. This is not found persuasive because the application is not a 371 national stage entry, but rather a continuation of a PCT.

The requirement is still deemed proper and is therefore made FINAL.

### *Specification*

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

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The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The Abstract appears to be longer than 150 words. If so, a substitute Abstract that is 50-150 words should be submitted.

3. The application is objected to because of alterations which have not been initialed and/or dated as is required by 37 CFR 1.52(c). A properly executed oath or declaration which complies with 37 CFR 1.67(a) and identifies the application by application number and filing date is required.

1:17 It appears that 30 has been struck-thru and 50 inserted in its place. However, this alteration is not initialed or dated, as required.

4. The use of the trademarks such as those on page 10 has been noted in this application. They should be capitalized wherever they appear and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

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5. The disclosure is objected to because of the following informalities:

- typo at 7:10

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 1-6, 11 and 18 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

a) 4:17      What is ureum? The term does not appear in standard chemical dictionaries.

b) 5:10-11      Low MW has not been defined, and is therefore indefinite.

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8. Claims 1-6, 11 and 18 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 1: “which is 50 to 300 C and is maintained for 1 to 20 minutes without selected additives” is not described in the specification as originally filed.

9. Claim 2 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 2: 3:5 describes the reactive hydrogen compound as being crystalline below 30 C, not below 90 C as claimed in claim 2.

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11. Claims 1-6, 11 and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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a) Claim 1, line 1: it is not clear if “coated” modifies only substrate or film and sheet as well.

b) Claim 1, line 5: “fine” has not been defined and is therefore indefinite.

c) Claim 1, line 8: “reacting the compounds” – polymers are also mentioned in line 5, but not included in “reacting” in line 8.

d) Claim 1, line 9: “selected” is not defined and is therefore vague.

e) Claim 1, line 11: it is not clear what is meant by “a similar reaction time”. How similar does the reaction time have to be to be termed “similar”?

f) Claim 1, line 12: there is no antecedent basis for “the reactants”.

g) Claim 1, line 12-13: there is no antecedent basis for “the other component”.

h) Claim 1: it is not clear at what temperatures and times the reaction is carried out. Is the reaction carried out at 50-300 C for 1 to 20 minutes, as well as 3-50 C higher or lower?

i) Claim 1: it is not clear how the temperature is adjusted higher or lower just by the addition of an additive. In addition, the identity and amount of the additive, surely important to the claimed temperature adjustment, are not defined.

j) Claim 4: should be put into proper Markush terminology – selected from the group consisting of.

k) Claim 4: is the polyisocyanate-functional compound and polyketone-functional compound of Claim 4 the same as the polyisocyanate-functional compound and polyketone-functional compound of line 3 of claim 1. If so, how can these compounds raise or lower the reaction temperature, when they are the main reactants?

l) Claim 5: “additives” (plural) is used three times as the plural, whereas “an additive” is claimed in line 11 of claim 1.

m) Claim 5, lines 2 and 3-4: there is no antecedent basis for “the reactants” (used twice).

n) Claim 5: it is not clear whose concentration and temperature are being claimed in claim 5.

o) Claim 5: claim 1 refers to only “an additive” being added. Therefore, the “sequence of the addition of additives” in claim 5 is meaningless.

p) Claim 5: it is not clear what is meant by “separate, prior addition”. Separate from what? Prior to what?



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q) Claim 6: there is no antecedent basis for “reaction rate”.

r) Claim 6: it is not clear what “together with a surfactant” modifies, metal catalyst or all of the species listed.

s) Claim 6: there is no antecedent basis for “the original temperature”.

t) Claim 11: it is not clear why the plural of mixture is used. Claim 1 claimed a coating mixture, singular.

u) Claim 11: it is not clear how the pot-life is being increased. Moreover, it is not clear under what circumstances the pot-life is 5-240 minutes and under what circumstances the pot-life is at least 1 day.

***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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13. Claims 1-6, 11 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 01/23451.

‘451 teaches reacting a polyisocyanate with a powder of a reactive H compound such as adipic dihydrazide or carbodihydrazide (4:6-5:10) by applying the mixture to a substrate and then immersing the coated substrate into water at 20-100 degrees C. The water is the additive that allows the reaction to occur at a temperature lower than the 50-300 degrees for 1-20 minutes that the reaction would normally occur (6:14-32). The reaction times are similar (1-20 minutes at the higher T, versus 0.5-10 minutes at the lower T). The difference in reaction T is -50 to 280 degrees C, which overlaps with applicant’s claimed T difference. The coating mixture has a long pot-life of at least 1 day, thus meeting claim 11 (3:8-18). The examiner has interpreted claim 6 to mean that the surfactant is added when a metal catalyst is added, and because water is the additive in ‘451, a surfactant is not required.

### ***Claim Objections***

14. Claim 3 is objected to because of the following informalities:

- the line below claim 3 reads “Claim 1 of 10/783165 reads:” This is obviously a typo.

Appropriate correction is required.

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***Conclusion***

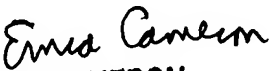
15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

16. Applicant should include a priority statement in the specification.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erma Cameron whose telephone number is 571-272-1416. The examiner can normally be reached on 8:30-6:00, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
ERMA CAMERON  
PRIMARY EXAMINER

Erma Cameron  
Primary Examiner  
Art Unit 1762

November 12, 2005